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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/874,662 | 06/04/2001 | Thomas C. Wilson | A-7160 | 5765 |

7590 11/10/2004
Scientific Atlanta, Inc.
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| EXAMINER |
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NG, CHRISTINE Y

| ART UNIT | PAPER NUMBER |
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2663

DATE MAILED: 11/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-----------------------------------|-----------------------------------|--|
| Office Action Summary | Application No. 09/874,662 | Applicant(s) WILSON, THOMAS C. | |
| | Examiner Christine Ng | Art Unit 2663 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7, 14, 16-20, 32, 33, 35, 36 and 38 is/are rejected.
- 7) ☒ Claim(s) 3-6, 8-13, 15, 21-31, 34 and 37 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites the limitation "the program identifier" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1, 14, 16-19, 32, 33, 35, 36 and 38 are rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Patent No. 6,219,358 to Pinder et al.

Referring to claim 1, Pinder et al disclose in Figure 3 a method of allocating PID values to a program in a digital transport stream (transport stream 302), the digital transport stream including at least one program including of a plurality of elementary streams. Refer to Column 6, lines 60-62. The method comprises the steps of:

(a) assigning a session number (program number in PAT 304) to a session (program), wherein the session is associated with a program having a plurality of elementary streams (shown in respective PMTs 306). Refer to Column 8, lines 7-27.

(b) associating a PMT_PID value with the session number (program number in PAT 304). "The PAT 304 identifies the PID for the packets containing the associated Program Map Tables (PMT) 306" (Column 8, lines 8-12).

(c) assigning a set of PID values to the elementary streams of the program. "PIDs of all video, audio and data elementary streams that belong in the same program stream are listed in a PMT 306 with their associated PIDs" (Column 8, lines 13-19).

(d) indicating in a map (PMTs 322,333) of allocable PID values the assigned PID values. PMT 322 lists the PIDs of elementary streams associated with program 1 and PMT 333 lists the PIDs of elementary streams associated with program 3. Refer to Column 8, lines 13-27.

Referring to claim 14, Pinder et al disclose in Figure 3 that the method further includes allocating a first set of PID values (PIDs in PAT 304) for use as PMT_PIDs, wherein only PIDs from the first set of PID values are associated with PMT packets; and allocating a second set of PID values (PIDS in PMTs 306) for assignment to elementary streams of programs, wherein only PIDs from the second set of PID values are assigned to elementary streams of a program. Refer to Column 8, lines 7-27.

Referring to claims 16 and 35, Pinder et al disclose in Figure 3 an apparatus in a digital network that includes a transport stream (transport stream 302) having a plurality

of programs included therein, wherein a program is defined by a set of elementary streams. Refer to Column 6, lines 60-62. The apparatus comprises:

Means/logic (PAT 304) for assigning a session number (program number in PAT 304) to a session (program), wherein a session (program) is associated with a program of the transport stream (transport stream 302). Refer to Column 8, lines 7-27.

Means/logic (PAT 304) for assigning a PMT_PID to the session. "The PAT 304 identifies the PID for the packets containing the associated Program Map Tables (PMT) 306" (Column 8, lines 8-12).

Means/logic (PMT 306) for allocating a set of PIDs to a set of elementary streams of a program. "PIDs of all video, audio and data elementary streams that belong in the same program stream are listed in a PMT 306 with their associated PIDs" (Column 8, lines 13-19).

Referring to claims 17 and 36, Pinder et al disclose in Figure 3 that the value of the PMT_PID assigned to the session is related to the session number (program number in PAT 304) of the session. "The PAT 304 identifies the PID for the packets containing the associated Program Map Tables (PMT) 306" (Column 8, lines 8-12).

Referring to claim 18, Pinder et al disclose in Figure 3 that the number (K) of PIDs in the set of allocated PIDs (listed in PMTs 322,333) is no more than the number (K) of elementary streams of the program. Refer to Column 8, lines 13-27.

Referring to claim 19, Pinder et al disclose in Figure 3 that the set of allocated PIDs (listed in PMTs 322,333) have values that are not contiguous. Refer to PMT 322 and 333 where the PIDs are not contiguous for streams 1-K.

Referring to claim 32, Pinder et al disclose in Figure 3 that the means (PMT 306) for allocating a set of PID values includes a PID allocation map (PMTs 322,333). Refer to Column 8, lines 13-27.

Referring to claim 33, Pinder et al disclose in Figure 3 that the PID allocation map (PMTs 322,333) includes an array of elements (streams 1-K) associated with PID numbers. Refer to Column 8, lines 13-27.

Referring to claim 38, Pinder et al disclose in Figure 3 that the logic (PAT 304) for assigning a PMT_PID includes a map of PID values (PAT 304). Refer to Column 7, lines 40-46 and Column 8, lines 7-12.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,219,358 to Pinder et al in view of U.S. Patent No. 6,775,257 to Watanabe.

Referring to claim 2, Pinder et al do not disclose that the method includes associating the session number with an output port, wherein the program that is associated with the session is transmitted from the output port.

Watanabe discloses in Figure 10 associating a session number (packet ID of program from PMT) with an output port (channels 32₁-34₁ to 32_n-34_n), wherein the

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program (PMT) that is associated with the session is transmitted from the output port (channels 32_1-34_1 to 32_n-34_n). The receiver (Figure 10) determines the CDM channel 32_1-34_1 to 32_n-34_n that contains the program that the user has designated. Refer to Column 8, lines 23-65 and Column 11, lines 48-57. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include associating the session number with an output port, wherein the program that is associated with the session is transmitted from the output port, the motivation being so that the programs can be transmitted to different output ports and the receiver can "receive only the packet that the user desires", thereby simplifying the configuration of the receiver and preventing it from consuming too much power. Refer to Abstract and Column 1, lines 31-37.

Referring to claim 20, Pinder et al do not disclose a plurality of output ports, each output port of the plurality of output ports adapted to transmit a transport stream having at least one program, wherein each program transmitted from an output port is associated with a unique session number.

Watanabe discloses in Figure 10 a plurality of output ports (channels 32_1-34_1 to 32_n-34_n), each output port of the plurality of output ports adapted to transmit a transport stream having at least one program (PMT), wherein each program transmitted from an output port is associated with a unique session number (packet ID of program from PMT). The receiver (Figure 10) determines the CDM channel 32_1-34_1 to 32_n-34_n that contains the program that the user has designated. Refer to Column 8, lines 23-65 and Column 11, lines 48-57. Therefore, it would have been obvious to one of ordinary skill

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in the art at the time the invention was made to include a plurality of output ports, each output port of the plurality of output ports adapted to transmit a transport stream having at least one program, wherein each program transmitted from an output port is associated with a unique session number, the motivation being so that the programs can be transmitted to different output ports and the receiver can "receive only the packet that the user desires", thereby simplifying the configuration of the receiver and preventing it from consuming too much power. Refer to Abstract and Column 1, lines 31-37.

Allowable Subject Matter

7. Claims 3-6, 8-13, 15, 21-31, 34 and 37 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

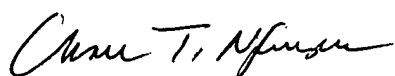
Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Ng whose telephone number is (571) 272-3124. The examiner can normally be reached on M-F; 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C.Ng *en*
November 3, 2004



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
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